

is compositionally different and of greater hardness than a base material forming said die body surface; and

shaping the cladde blade.

2. (Twice Amended) A method as in claim 1 wherein said cladding step includes:
heating said area of said die body surface; and
introducing said blade material into the heated area while heating said area and
building said blade of said blade material outwardly from said surface in a single pass of said
laser.

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Conclude

3. (Twice Amended) A method as in claim 1 wherein the die body surface is cylindrical
and including heating said area with said laser and introducing said blade material into the heated
area while heating said area to completely build said blade on said cylindrical die body surface.

4. (Twice Amended) A method as in claim 1 including introducing cladding powder
comprising a carbide into the heated area while heating said area for building said blade.

17. (Amended) A process for forming a cutting die comprising the steps of:
cladding a blade material onto a die surface of a material different than said blade
material to form a blade extending outwardly from said surface, said cladding step including the
steps of heating an area of said die surface, and introducing blade material into the heated area

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while heating said area and building a blade of said different blade material outwardly from said surface; and

shaping the cladded blade.

18. (Amended) A process for forming a cutting die comprising the steps of:

cladding a blade material onto a die surface to form a blade extending outwardly from said surface, said cladding step including the steps of heating an area of said die surface, and introducing blade material into the heated area while heating said area in at least two layers and building a blade of said material outwardly from said surface; and

shaping the cladded blade.

20. (Twice Amended) A method of forming a cutting die including a die body and an integral blade extending outwardly from a surface of said die body, the method comprising the steps of:

cladding a blade material onto an area of said die body surface by heating said area with a laser, and by depositing said blade material into the heated area while heating said area in multiple successive layers to form a blade extending outwardly from said surface, wherein said blade material is compositionally different and of greater hardness than a base material forming said die body surface and wherein said blade has a hardness equivalent to the final desired hardness of said blade; and

after said cladding step, shaping the cladded blade.

21. (Twice Amended) A method of forming a cutting die comprising the steps of:

depositing a carbide-containing blade material in multiple successive layers onto a cylindrical die surface by laser cladding with a material feeder coaxial with a laser beam to form a cladded blade extending outwardly from said surface, wherein said blade material is compositionally different and of greater hardness than a base material forming said die surface; and

after said depositing step, shaping the cladded blade.

22. (Twice Amended) A method of forming a cutting die comprising the steps of:

heating an area of a cylindrical die surface in a path corresponding to a desired blade pattern including intersecting blades;

depositing a layer of blade material into said path while heating said area by laser cladding, wherein said blade material is compositionally different and of greater hardness than a base material forming said die surface;

repeating the step of depositing blade material onto a preceding layer of blade material until a blade of desired thickness is formed extending outwardly from said surface in said pattern; and

after said blade of desired thickness is formed, shaping the blade.

24. (Twice Amended) A method as in claim 22 including heating said area with said laser and introducing a carbide-containing blade material into the heated area while heating said area and building a blade having a hardness equivalent to the final desired hardness of said blade.

Add new claims 30-31.

30. (New) The method as in claim 1 wherein said introducing step includes feeding said blade material by a feeder coaxial with a beam of said laser to heat said blade material while heating said area.

31. (New) The method as in claim 1 wherein said die body is cylindrical, the method including rotating said die body to provide one component of relative motion between said die body and said laser.
